

MANAGING HEALTH & SAFETY DURING BUSINESS PROCESS RE-ENGINEERING

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Recently, chemical and pharmaceutical companies have faced the need to 'downsize' or 'right size' their workforce to meet financial pressures from competitors whilst the maintaining and improving health and safety performance. The re-engineering process changed an hierarchically managed company to a team based organisation. The challenges faced by the company as it sought to maintain good communications, train its workforce to take on empowerment are discussed. Health and safety performance has significantly improved during re-engineering but there are further gains to be made.

Keywords: Re-engineering, safety, consultants, business process.

INTRODUCTION

The current financial and economic climate is changing the way in which many companies operate. Competition means companies must 'downsize' or 'rightsize' to remain profitable whilst retaining their ability to operate safely.

At this company external pressures resulted in a reduction in head count from approximately 700 to 500 in a two year period. The reporting structure changed from 45 departments led by Directors and Managers to 13 teams or business units headed by Team Leaders.

This process of re-engineering was facilitated by external consultants who were assisted by selected employees. Each Team Leader would decide, on the basis of their core business, the structure of their team. The philosophy being that de-layering the reporting lines would "empower" the workforce to take ownership of their activities and build up relationships as team members to secure a successful business unit.

The company's employees are members of three different trade unions and therefore appropriate consultation had to take place. The major changes that resulted from the voluntary redundancies, different reporting structures and fewer people doing the same amount of work as before required re-appraisal of key activities, increased training and multi-skilling. Those represented by the unions, i.e. process operators, crafts people and laboratory staff were the groups on whom re-engineering had the greatest effect.

This paper describes the Health and Safety (H&S) aspects of re-engineering including the importance of attitudes towards health and safety at a senior level, the opportunities for H&S in re-engineering and the lessons learned in the process

THE COMPANY BEFORE RE-ENGINEERING

As mentioned, the company had a traditional reporting structure. A general manager, directors, managers, section heads and supervisors. In some instances laboratory staff had 7 levels of reporting structure. Who would "own" safety within this arrangement? The answer in the main would be - the supervisor. This person was "responsible" for taking corrective action for accidents and incidents and audits. The manager would chair the monthly H&S meetings but the supervisor would take away the task of ensuring that the appropriate corrective actions were carried out. Employees attended these meetings reluctantly and Union Appointed Safety Representatives viewed them as a platform for airing all forms of grievances in the guise of Health and Safety (H&S).

The H&S group, which also includes the Environmental discipline reported to a manager and then to the Personnel Director. This group, including the Director, attended the Union Safety Committee set up under the Safety Representatives and Safety Committees Regulations 1977 (S R & S C Regs), met for a full day every 2 months.

Again, this was a platform for confrontation. A "them and us" situation existed, and a fairly sterile one at that since those attending, i.e. Union Representatives and the H&S group had no line authority to bring about the actions requested by the Safety Representatives. It was in danger of becoming a talking shop and an expensive one with 20 Representatives who were mainly shift workers attending either on overtime or with someone replacing them on their Rota receiving overtime. Actions in the form of minutes would go out from these meetings to all the managers and directors; were they acted up on? The question better asked would be "How many Directors/Managers actually read them?". And what of the work being done by the H&S group? Who in a department of 5 or 6 levels of reporting would be the person to advise on a new piece of legislation or inform about best working practices? The supervisor was usually this person and he would then have to prioritise this into a busy production schedule - generally at the bottom!

This was the health and safety climate in which re-engineering was to be introduced.

THE PROCESS

The consultants suggested that the company could operate with approximately 200 less employees. This reduction would be achieved by voluntary redundancy. Employees, especially those with over 20 years service, were made very attractive offers resulting in a significant loss of experienced and well trained people and considerable loss of plant operational history.

The remaining workforce were re-ordered into 13 self-directing teams (5 support teams and 8 manufacturing teams) in sizes ranging from 8 (in Human Resources) to over 100 in one of the manufacturing teams.

The consultants assisted the Team Leaders to structure their team to meet business requirements. At the start this restructuring did not take into account H&S. Furthermore over half of the Team Leader's had not previously been managers and the consultants did not initially

apply the good principles of H&S in putting responsibility for H&S clearly in the hands of Team Leaders.

At one stage the consultants considered dispersing the Environmental Health and Safety (EHS) group within the teams but this was later rejected in favour of the traditional centralised function.

First learning point - make sure consultants have sufficient H&S knowledge

However re-engineering did provide an opportunity to transfer to the teams a number of activities that the EHS group had they had previously carried out, e.g. inspections, risk assessments. EHS can now get on with doing what it should be doing, i.e. advisory, providing technical support and auditing. In nautical terms "steering the ship".

CHALLENGES

It is human nature to resist the significant changes that re-engineering introduces. The team approach requires different ways of thinking and different ways of working. The Team Leaders differed in the way they structured their teams. One Team Leader opted for total employee empowerment with not even token supervision. This meant in some cases that instead of an Operations Technician (Optech.) having a supervisor to 'direct' their work they had to 'get on with the job' themselves. Another used 'shift leaders' with a job description closely matching that of supervisor.

Self directing work groups operating without supervision may seem to contradict the general duties outlined in Section 2 of the Health and Safety at Work etc. Act of 1974. However, the company ensured that the workforce had sufficient information, instruction and training to do the job safely by giving these teams extensive process training with many taking City and Guilds courses.

To ensure that the core business concentrated on only those activities that need to be done and that production ran to schedule, it was also necessary to multi-skill the operators and the craftsmen. The idea being that an Optech could carry out basic maintenance on the plant and equipment that he was operating and that the craftsman would be able to do process work should the need arise. Multi-skilling is the subject of an HSE Guideline and can be very successful provided the employees buy into it. The dangers can be Optechs 'over-stepping' their knowledge base and carrying out work that they are not authorised to do, e.g. electrical isolations or craftsmen doing a type of manual work that they are not used to doing. A source of friction can be disparity in pay grades as traditionally a skilled craftsman has been paid more than a skilled operator.

Not only were radical changes made to work organisation but also to the structure of the health and safety committees. Before re-engineering the Safety Representatives who worked shifts would be well 'rewarded' for attending their safety meetings in the form of an overtime payment. In the new organisation overtime was not allowed. Annualised hours provided sufficient extra hours in the year for such things as training and attending meetings.

The Safety Representatives meeting was viewed as costly and, because of the lack of line management, unproductive. A different approach which met the full requirements of the SR and SC Regs. and which had the agreement of the Safety Representatives had to be found.

Second learning point - ensure that the decision for changes are agreed not imposed.

EHS COMMITTEES

Communication is an important issue. The various EHS committees were re-organised to reflect the new structure.

The site management committee which focuses on site EHS policy making, objective setting and strategy had previously comprised managers and directors and chaired by a manufacturing director. The new committee, now chaired by the General Manager comprises Team Leaders, EHS group, some EHS co-ordinators and representatives from the three site unions.

At team level each of the EHS committees is attended by plant engineers, Optechs, the EHS co-ordinator and Safety Representatives and is chaired by the Team Leader.

The Safety Representatives committee now only meets quarterly and the meetings are more structured. They discuss new information received from their unions and also any new site policies. They have objectives and feedback from their meeting comes via the Representatives attending the site EHS management committee meetings.

Third learning point - have a clear cascaded committee structure to ensure two way communication.

EHS KNOWLEDGE IN THE TEAMS

With the perceived increased in the workload for the teams in terms of EH&S, arrangements needed to be put in place to ensure that the teams had the structure to support not only H&S legislative requirements but also the requirements of Corporate and the standards demanded by the General Manager.

Five years ago the role of Area Safety Co-ordinator had been established based on a similar function operating on the American plant sites. Their main duties were arranging safety meetings, leading safety inspections and carrying out accident investigation.

Because the new team structure was to incorporate EH&S one of the first tasks of the Team Leader was to appoint an EHS co-ordinator. The original role was extended to include practical activities such as environmental and exposure monitoring in addition to developing EHS procedures and co-ordinating their teams risk assessment programme.

EHS co-ordinators have been appointed in a full time capacity in the largest manufacturing team and on a part-time basis other teams.

Fourth learning point - ensure that people carrying out EHS roles within teams have the time and are committed to the role.

EH&S GROUP INITIATIVES

To ensure that all aspects of EH&S were integrated into the re-engineering process the EH&S group worked with each Team Leader in identifying key activities and providing the technical advice and training in these areas.

Basic activities such as planned audit-based inspections, accident / incident investigations and H&S committee meetings and the use of permit to work systems were already established and need only to be extended to include environmental and hygiene criteria.

However, other major activities such as HAZOPS and Risk Assessments needed a lot more support. All new projects had been through a HAZOP and the resulting tasks had been subjected to Risk Assessments.

Established tasks had been through a process hazard review a few years previously and ranked according to an American (Corporate) rating procedure. As a result some HAZOPS had been carried out but, because of the movement and loss of engineers, documentation was scanty. Loss of people had meant loss of information and to quote Trevor Kletz (1) "organisations have no memories" .

Fifth learning point - establish a recordable and traceable system for key activities prior to and during restructuring

A steering committee has now been set up with the remit of identifying the gap, prioritising the processes and arranging the HAZOPS. Meanwhile all engineers are being taken through the IChem E HAZOP training programme.

Risk assessments are being tackled in two ways on the site. One production team has contracted the work to a company who uses ex-factory inspectors. The contractor firstly spent some time getting to know the people on the plant, the work that the team does and the procedures that are in place for risk assessment. All his assessments and corrective actions have to be agreed with by the people in that plant. He is seen by them as someone who is there to help them to work safely and it has been successful. Other teams are using their EHS co-ordinators to direct the assessments with the team providing "on the job" information about work activities .

The process used for risk assessment is a task based approach and where for example potential exposure to chemicals or product may occur an assessment as outlined by the Control of Substances Hazardous to Health 1994 Regulations is carried out. Training is given by the EHS group.

TRAINING AND COMPETENCE

Part of the re-engineering process was to identify critical activities and ensure that the skills were there to get the jobs done in a safe and timely manner.

Consultants who were aligned with a local training college provided the solution. In house training using time from the site system of annualised hours would allow 'on the job' type training.

The training project financed the setting up of a purpose built training centre and a workshop. The workshop is being used for the 'multi-skilling' training. Laboratory skills were also assessed with any gaps being identified and training given.

The next stage is to concentrate on production skills by setting up a production training plant in an empty plant room. Here both production workers and craftsmen will enhance their skills whilst safe methods of working are demonstrated.

Administration people have not been left out. Any personnel movements caused by re-engineering has resulted in identification of training needs in terms of computer skills. Physical movements in these areas has also meant re-assessment of the workstations under the H&S (Display Screen Equipment) Regulations 1992.

Sixth learning point - ensure that the results of risk assessments are fed into production training.

FUTURE PLANS

Although sometimes the path may not have seemed very clear re-engineering cannot be a step in the dark. Once Team Leaders established team requirements to meet the needs of their core business those needs have to be continually reassessed if improvements are to occur.

For some teams this has meant taking on contractors for periods up to a year. For others it has meant moving production and crafts people between teams.

One major step forward is the decision by the General Manager to take on the Investors in People programme. Investors in People should help to improve the company's performance by focusing on :-

- the commitment from the top to develop all employees achieve its business objectives;
- ensuring that adequate resources for training and development of employees are integrated into business plan;
- evaluating the effectiveness of training and development against business goals and targets.

Plans to meet this standard are underway with job descriptions, performance objectives which include health and safety and appraisals are in place at all levels.

Seventh learning point - the process only moves forward when top management lead.

CONCLUSION

Re-engineering was viewed with suspicion. It challenged the comfortable existence of all of us. The loss of colleagues and the perceived increase in workload together with annualised hours and the promise of an appraisal system for all did cause a dip in morale. However, nothing lasts forever and although there are still some issues to be ironed out the workforce has settled in to the new arrangements and valuable lessons have been learned.

With the emphasis from the top on training, communication and continuous improvement and a recordable accident rate which has dropped by half, the future looks safe and healthy for this company.

1. Kletz T., 1993, Lessons from disaster - how organisations have no memory and accidents recur. I Chem E ISBN 0 85295 307 0